

SOLDER INTERCONNECT TECHNIQUES

ABSTRACT OF THE DISCLOSURE

A method and article of fabrication is described featuring a solder layer having a serpentine, interrupted, or interdigitated boundary. The non-planar design of the boundary layer increases the fatigue life of the solder joint by limiting the damage caused by micro-cracking. This irregularity of the solder boundary constrains the propagation of cracks by creating obstacles along the crack path, redirecting the crack away from the intermetallic layer, or by increasing the path along which the crack propagates.